PROCEEDINGS OF THE INDIAN ACADEMY OF SCIENCES

(Chemical Sciences)

VOLUME 92, 1983

INDEX

INDIAN ACADEMY OF SCIENCES BANGALORE 560 080

ENDIAN ACADEMY OF SCIENCES

(Chemical Sciences)

DELTE SECURE

N B L I SU I

plex containing alkali ions

and antibacterial agents

Copolymers and their polychelates derived from

hydroxy benzoic (o- and p-) acids as antifungal

Antimicrobial activity

605

SUBJECT INDEX (Chemical Sciences)

Absorption	Arsenic chalcogenide glasses
Effect of ring aza substitution on the luminescence	Photoacoustic spectra of As ₂ S ₃ —As ₂ Se ₃ glasses
of aromatic ketones. Luminescence of isomeric	65
acetylpyridines 47	Aspirin-like drugs
Activation energy	Structure and interactions of aspirin-like drugs
Uncatalysed oscillations in the bromate-	463
pyrogallol system 221	Associative interchange
Periodic crystallisation of magnesium hydroxide	Kinetics and mechanism of anation of hydroxo-
in agar agar gel. Influence of temperature 239	penta-aquo chromium(III) ion by DL-alanine in
Activation parameters	aqueous solution 153
Oxidation of phenylmethylcarbinols by bromam-	Auger electron spectra
ine- <i>T</i> 107	X-ray photoelectron and Auger studies of Ag _{2+δ} S
Addition products	43
Addition products of dimethyl acetylenedicar-	
boxylate to thioureas-studies on 2-(p-bromo-	Beta-aminodiketone
phenyl) imino-3-methyl-5-carbomethoxymethyl-	Synthesis and characterisation of some novel β -
idenethiazolidin-(4)-one 99	aminodiketones 189
Adduct formation constant	Bidentate
Effect of several auxiliary ligands on the extrac-	Infrared spectral evidence for mono-, bi- and
tion of cadmium(II) with 2-thenoyltrifluoro-	tetra- dentate behaviour of hexamethylenetetra-
acetone 167	mine 59
Adsorption	Bilayer smectics
Role of salt effect and adsorption on the	On the polymorphism of the smectic A phases of
Liesegang ring formation of lanthanum	highly polar compounds 509
molybdate 233	Bimetallic
Agar-agar gel	Preparation and structural studies of a new series
Periodic crystallisation of magnesium hydroxide	of bimetallic complexes 163
in agar agar gel. Influence of temperature 239	Bridged
Alpha-beta transition	Preparation and structural studies of a new series
A theoretical consideration of the intermediate	of bimetallic complexes 163
phase in α - β transition of quartz 429	Bromamine-T
Amino acid	Oxidation of phenylmethylcarbinols by bromam-
Kinetics and mechanism of anation of hydroxo-	ine- <i>T</i> 107
penta-aquo chromium(III) ion by DL-alanine in	Bromate-sulphuric acid
aqueous solution 153	Uncatalysed oscillations in the bromate-pyro-
Aminothiols	gallol system 221
Structural evidence for the radical scavenging	The state of the s
mechanism of some aminothiol group of radio-	
protectants 457	Cadmium
Anation	Effect of several auxiliary ligands on the extrac-
Kinetics and mechanism of anation of hydroxo-	tion of cadmium(II) with 2-thenoyltrifluoro-
penta-aquo chromium(III) ion by DL-alanine in	acetone 167
aqueous solution 153	Cancrinite
Anharmonic molecular vibrations	EPR studies of phosphine photofragments in can-
Very anharmonic molecular vibrations 563	crinite matrix at 77 K 597
Anomalous dielectric dispersion	Carbamides
Anomalous dielectric dispersion in glycolchito-	Synthesis and characterization of hexa, hepta and
sancarboxy methyl cellulose poly-electrolyte com-	octa-coordinated Nb(V) complexes of N,N'-
plex containing alkali ions 551	(substituted)-formamidino-N'-(substituted) car-

bamides and thiocarbamides

Macromolecular crystallography research at

Carbonic anhydrase

Trombay

	Ceustalline complexes
Catalysis	Crystalline complexes Structure and interactions of aspirin-like drugs
The principles of chemical conversion of organic	463
molecules using sheet smeate inter-	Crystallography
C=C bond lengths Crystallographic study of push-pull ethylenes	Maximum entropy—A new approach to the crys-
Crystanographic study of push-pun ethylenes	tallographic phase problem 341
	Crystal structure
Chalconeoxime complexes Stereochemistry of copper(II), nickel(II) and	The crystal structure of 5α-cyano-3-keto-10-
cobalt(II) 2'-hydroxy-5'-X-chalconeoxime com-	methyl-octahydronaphthalene 279
plexes 265	Crystal and molecular structure of pyrrolidine
Charge densities	dithiocarbamate cobalt(III) chelate 437
Mathematical methods for the analysis of charge	Structural evidence for the radical scavenging
densities from x-ray diffraction 379	mechanism of some aminothiol group of radio-
Chemical bonding	protectants 457
Predictive character of solid state chemistry:	Structural changes in the monomeric despentap-
Relation between structure, chemical bonding and	eptide (B30-B26) insulin crystal 473
physical properties of solids 1	Crystal structure analysis
Chemical resolution	Maximum entropy—A new approach to the crys-
Chiral synthesis of optically active $S(+)-2,6,7,7a$	tallographic phase problem 341
tetrahydro-1β-hydroxy-4-formyl-7aβ-methylin-	Crystal structure determination
dene 181	Determination of one-dimensional crystal struc-
Chiral NMR shift reagent	tures using the double Patterson function 385
Chiral synthesis of optically active $S(+)-2,6,7,7a$	Cupric complexes
tetrahydro-1β-hydroxy-4-formyl-7aβ-methylin-	Stability of mixed ligand complexes of copper(II):
dene 181	ESR Studies 113
Chiral synthesis	Cyanate
Chiral synthesis of optically active $S(+)-2,6,7,7a-$	Preparation and structural studies of a new series
tetrahydro-1β-hydroxy-4-formyl-7aβ-methylin-	of bimetallic complexes 163
dene 181	0
CNDO/2 method	
EPR studies of phosphine photofragments in can-	
crinite matrix at 77 K 597	Dehydration of butanol
C=O and C=C stretching vibrations	Sulphonated macroporous resin catalysts: Studies
	Sulphonated macroporous resin catalysis. Studies
On the vibrational structure involving C=O	on the dehydration of 2-butanol 227
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-	
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127	on the dehydration of 2-butanol 227
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicar-
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophe-
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in can-	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl -5- carbomethoxymethyliden-
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl -5- carbomethoxymethylidenethiazolidin-(4)-one 99
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one 99 Direct methods
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl -5- carbomethoxymethylidenethiazolidin-(4)-one 99 Direct methods The efficient generation of phase sets by the
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one 99 Direct methods The efficient generation of phase sets by the random approach 323
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one 99 Direct methods The efficient generation of phase sets by the random approach 323 Maximum entropy—A new approach to the
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance Conductance glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one 99 Direct methods The efficient generation of phase sets by the random approach 323 Maximum entropy—A new approach to the crystallographic phase problem 341
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α -cyano-3-keto-10-	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one 99 Direct methods The efficient generation of phase sets by the random approach 323 Maximum entropy—A new approach to the crystallographic phase problem 341 Determination of one-dimensional crystal struc-
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Maximum entropy—A new approach to the crystallographic phase problem 341 Determination of one-dimensional crystal structures using the double Patterson function 385
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α -cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Maximum entropy—A new approach to the crystallographic phase problem 341 Determination of one-dimensional crystal structures using the double Patterson function 385 Dispersion techniques
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α -cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Adaximum entropy—A new approach to the crystallographic phase problem Jetermination of one-dimensional crystal structures using the double Patterson function Dispersion techniques The phase problem in neutron diffraction 403
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α -cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of	on the dehydration of 2-butanol 227 Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal 473 Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one 99 Direct methods The efficient generation of phase sets by the random approach 323 Maximum entropy—A new approach to the crystallographic phase problem 341 Determination of one-dimensional crystal structures using the double Patterson function 385 Dispersion techniques The phase problem in neutron diffraction 403 3d metal complexes
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of the complex formed by Pseudomonas aeruginosa	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Adaximum entropy—A new approach to the crystallographic phase problem Determination of one-dimensional crystal structures using the double Patterson function 385 Dispersion techniques The phase problem in neutron diffraction 3d metal complexes 3d-metal complexes of salicylaldehyde ethoxy-
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of the complex formed by Pseudomonas aeruginosa 527	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Adaximum entropy—A new approach to the crystallographic phase problem Determination of one-dimensional crystal structures using the double Patterson function Dispersion techniques The phase problem in neutron diffraction 3d metal complexes 3d-metal complexes of salicylaldehyde ethoxythiocarbonyl hydrazone 173
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal-bonds of the complex formed by Pseudomonas aeruginosa 527 Coulomb potential	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Maximum entropy—A new approach to the crystallographic phase problem 341 Determination of one-dimensional crystal structures using the double Patterson function 385 Dispersion techniques The phase problem in neutron diffraction 3d metal complexes 3d-metal complexes of salicylaldehyde ethoxythiocarbonyl hydrazone 173 Donor ligand
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of the complex formed by Pseudomonas aeruginosa 527 Coulomb potential Electron density distribution in potassium bis-	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Maximum entropy—A new approach to the crystallographic phase problem 341 Determination of one-dimensional crystal structures using the double Patterson function 385 Dispersion techniques The phase problem in neutron diffraction 3d metal complexes 3d-metal complexes of salicylaldehyde ethoxythiocarbonyl hydrazone 173 Donor ligand Manganese(II) complexes of some nitrogen-
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal-bonds of the complex formed by Pseudomonas aeruginosa 527 Coulomb potential	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Adaimum entropy—A new approach to the crystallographic phase problem Jetermination of one-dimensional crystal structures using the double Patterson function Jispersion techniques The phase problem in neutron diffraction do 3d metal complexes Jad-metal complexes Jad-metal complexes of salicylaldehyde ethoxythiocarbonyl hydrazone Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of the complex formed by Pseudomonas aeruginosa 527 Coulomb potential Electron density distribution in potassium bis-(carbonato) cuprate(II) 443 Cramer's limit theorem	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Jimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)mino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Maximum entropy—A new approach to the crystallographic phase problem 341 Determination of one-dimensional crystal structures using the double Patterson function 385 Dispersion techniques The phase problem in neutron diffraction 3d metal complexes 3d-metal complexes 3d-metal complexes of salicylaldehyde ethoxythiocarbonyl hydrazone 173 Donor ligand Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Double Patterson
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of the complex formed by Pseudomonas aeruginosa 527 Coulomb potential Electron density distribution in potassium bis-(carbonato) cuprate(II) 443 Cramer's limit theorem The probability of large structure amplitudes: The	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Adaximum entropy—A new approach to the crystallographic phase problem Determination of one-dimensional crystal structures using the double Patterson function 3d metal complexes 3d-metal complexes of salicylaldehyde ethoxythiocarbonyl hydrazone Donor ligand Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Double Patterson Determination of one-dimensional crystal struc-
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of the complex formed by Pseudomonas aeruginosa 527 Coulomb potential Electron density distribution in potassium bis-(carbonato) cuprate(II) 443 Cramer's limit theorem	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach The efficient generation of phase sets by the crystallographic phase problem Javanum entropy—A new approach to the crystallographic phase problem Determination of one-dimensional crystal structures using the double Patterson function The phase problem in neutron diffraction Manganese (II) complexes of salicylaldehyde ethoxythiocarbonyl hydrazone Donor ligand Manganese (II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands Determination of one-dimensional crystal structures using the double Patterson function Determination of one-dimensional crystal structures using the double Patterson function 385
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p-benzoquinone-h ₄ and -d ₄ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of the complex formed by Pseudomonas aeruginosa 527 Coulomb potential Electron density distribution in potassium bis-(carbonato) cuprate(II) 443 Cramer's limit theorem The probability of large structure amplitudes: The space group PI 335 Critical point phenomena	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach Adaximum entropy—A new approach to the crystallographic phase problem Determination of one-dimensional crystal structures using the double Patterson function 3d metal complexes 3d-metal complexes of salicylaldehyde ethoxythiocarbonyl hydrazone Donor ligand Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands Double Patterson Determination of one-dimensional crystal structures using the double Patterson function 385 d-spacings
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$ 127 Cobalt-chelate Crystal and molecular structure of pyrrolidine dithiocarbamate cobalt(III) chelate 437 Computer simulation EPR studies of phosphine photofragments in cancrinite matrix at 77 K 597 Conductance Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203 Conformation The crystal structure of 5α -cyano-3-keto-10-methyl-octahydronaphthalene 279 Copper compounds XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of the complex formed by Pseudomonas aeruginosa 527 Coulomb potential Electron density distribution in potassium bis-(carbonato) cuprate(II) 443 Cramer's limit theorem The probability of large structure amplitudes: The space group $P\bar{1}$ 335	on the dehydration of 2-butanol Despentapeptide insulin Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal Dimethyl acetylenedicarboxylate Addition products of dimethyl acetylenedicarboxylate to thioureas-studies on 2-(p-bromophenyl)imino-3- methyl-5- carbomethoxymethylidenethiazolidin-(4)-one Direct methods The efficient generation of phase sets by the random approach The efficient generation of phase sets by the crystallographic phase problem Javanum entropy—A new approach to the crystallographic phase problem Determination of one-dimensional crystal structures using the double Patterson function The phase problem in neutron diffraction Manganese (II) complexes of salicylaldehyde ethoxythiocarbonyl hydrazone Donor ligand Manganese (II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands Determination of one-dimensional crystal structures using the double Patterson function Determination of one-dimensional crystal structures using the double Patterson function 385

iii

Effect of monomer	Fenamates
Uncatalysed oscillations in the bromate-pyro-	Structure and interactions of aspirin-like drugs
gallol system 221	463
Electrical conductivity	Flocculation value
Structural, electrical and reflectance studies of the	Periodic crystallisation of magnesium hydroxide
system $ZnMn_{2-2x}Ni_xTi_xO_4$ 139	in agar agar gel. Influence of temperature 239
Electrogyration	Fluorine scrambling
Electro- and magnetogyration 421	Very anharmonic molecular vibrations 563
Electron density deformation	Force constants
Electron density distribution in potassium bis-	Isotopic invariants of pyramidal symmetrical XY ₃
(carbonato) cuprate(II) 443	molecules and evaluation of molecular constants
Electron density modelling	211
Mathematical methods for the analysis of charge	Free radical
densities from x-ray diffraction 379	EPR studies of phosphine photofragments in can-
Electronic configuration	crinite matrix at 77 K 597
Predictive character of solid state chemistry:	Fundamental principle
Relation between structure, chemical bonding and physical properties of solids	The phase problem of x-ray crystallography 291
Electron spin resonance	271
Stability of mixed ligand complexes of copper(II):	Glass matrix spectrum
ESR studies 113	Electronic spectra of paramethoxy benzyl alcohol
3d-metal complexes of salicylaldehyde ethoxy-	and parachloro benzyl cyanide 197
thiocarbonyl hydrazone 173	Glycolchitosan
Electronic	Anomalous dielectric dispersion in glycolchito-
3d-metal complexes of salicylaldehyde ethoxy-	san-carboxy methyl cellulose poly-electrolyte
thiocarbonyl hydrazone 173	complex containing alkali ions 551
Emission	Glycol mixtures
Effect of ring aza substitution on the luminescence	Conductance behaviour of HCl in water-ethylene
of aromatic ketones. Luminescence of isomeric	glycol, water-diethylene glycol and ethylene
acetylpyridines 47	glycol-diethylene glycol mixtures 203
Energy transfer	Guinier camera
Predictive character of solid state chemistry:	Precision of determination of d-spacings using a
Relation between structure, chemical bonding and	Guinier camera 397
physical properties of solids 1	
Enzyme mechanism	Hammett plot
Macromolecular crystallography research at	Oxidation of phenylmethylcarbinols by
Trombay 497	bromamine-T 107
Ethylenediamine	Hard substances
Polarographic study of mixed ligand complexes of	Precision of determination of d-spacings using a
Pb(II) with ethylenediamine-malonate and pro-	Guinier camera 397
Pylono-diaminio maionaso	Harmonic vibrations
EXAFS XANES and EXAFS of copper compounds: Studies of	Very anharmonic molecular vibrations 563
copper carboxylates with metal-metal bonds of	Hexamethylenetetramine
the complex formed by Pseudomonas aeruginosa	Infrared spectral evidence for mono-, bi- and
the complex formed by 1 seadomonds deruginosa	tetra- dentate behaviour of hexamethylenetetra-
Extinction correction	mine 59
Extinction correction and synchrotron radiation	High spin
359	Stereochemistry of copper(II), nickel(II) and
Extraction constant	cobalt(II) 2'-hydroxy-5'-X-chalconeoxime com- nlexes 265
Effect of several auxiliary ligands on the extrac-	President
tion of cadmium(II) with 2-thenoyltri-	Homoatomic bonding defects Photoacoustic spectra of As ₂ S ₃ —As ₂ Se ₃ glasses
fluoroacetone 167	Filotoacousiic specifa of As ₂ S ₃ —As ₂ Se ₃ glasses
	Hydrazine complexes
	Preparation, characterization and thermal
	properties of di-N-isothiocynatodihydrazine
For an photolysis	metal(II) 83
Far-UV photolysis EPR studies of phosphine photofragments in can-	Hydrogen bonding
crinite matrix at 77 K 597	Kinetics and mechanism of anation of
Fast ionic conductors	hydroxopenta-aquo chromium(III) ion by DL-
Predictive character of solid state chemistry:	alanine in aqueous solution 153
Relation between structure, chemical bonding and	Hydrogen chloride
physical properties of solids 1	Conductance behaviour of HCl in water-ethylene

glycol, water-diethylene glycol and ethylene	Jahn-Teller distortion
glycol-diethylene glycol mixtures 203	Preparation and structural studies of a new series
Hydroxopenta-aquo chromium(III) ion	of bimetallic complexes 163
Kinetics and mechanism of anation of hydroxo-	
penta-aquo chromium(III) ion by DL-alanine in	Kinetics of solidification
aqueous solution 153	Polymer alloys: Science and practice 623
Hydroxynaphthalene	and the second s
The near UV vapour absorption spectra of 1-	Lang's theory
hydroxynaphthalene and 2-hydroxynaphthalene	A theoretical consideration of the intermediate
nydroxynaphthalene and 2-hydroxynaphthalene	phase in α - β transition of quartz 429
133	
Illite	Lanthanum molybdate
Thermodynamics of exchange in clays: Ion ex-	Role of salt effect and absorption on the
Thermodynamics of exchange in clays, for ex-	Liesegang ring formation of lanthanum molyb-
change equilibria of transition metals and sodium	date 233
ions on illite 589	Laue spots
Image reconstruction	A theoretical consideration of the intermediate
Determination of one-dimensional crystal struc-	phase in α - β transition of quartz 429
tures using the double Patterson function 385	Lead(II)
Induced smectic phases	Polarographic study of mixed ligand complexes of
On the polymorphism of the smectic A phases of	Pb(II) with ethylenediamine-malonate and pro-
highly polar compounds 509	pylene-diamine-malonate 77
Inducive effect	Liesegang ring formation
Effect of ring aza substitution on the luminescence	Role of salt effect and absorption on the
of aromatic ketones. Luminescence of isomeric	Liesegang ring formation of lanthanum molyb-
acetylpyridines 47	
Infrared spectra	anti-
	Ligand field spectra
Infrared spectral evidence for mono-, bi- and tetra-	Stereochemistry of copper(II), nickel(II) and
dentate behaviour of hexamethylenetetramine 59	cobalt(II) 2'-hydroxy-5'-X-chalconeoxime com-
Preparation, characterization and thermal	plexes 265
properties of di-N-isothiocynatodihydrazine	Linear accelerator
metal(II) 83	Neutron diffraction using an electron linear
Intensity borrowing	accelerator 415
Electronic spectra of paramethoxy benzyl alcohol	Long range force
and parachloro benzyl cyanide 197	Electron density distribution in potassium bis-
Interphase adhesion	(carbonato) cuprate(II) 443
Polymer alloys: Science and practice 623	Luminescence
Inversions	Effect of ring aza substitution on the luminescence
Anharmonic molecular vibrations 563	of aromatic ketones. Luminescence of isomeric
Insulin	acetylpyridines 47
Structural changes in the monomeric despenta-	Lysozyme
peptide (B30-B26) insulin crystal 473	
Intercalation compounds	Macromolecular crystallography research at
Predictive character of solid state chemistry:	Trombay 497
Relation between structure, chemical bonding and	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
physical properties of solids 1 Ion exchange	
Thermodynamics of exchange in clays: Ion ex-	Macroporous resin catalysts
change equilibria of transition metals and sodium	Sulphonated macroporous resin catalysts: Studies
ions on illite 589	on the dehydration of 2-butanol 227
Ion-pair	Magnesium hydroxide
Kinetics and mechanism of anation of hydroxo-	Periodic crystallisation of magnesium hydroxide
penta-aquo chromium(III) ion by DL-alanine in	in agar agar gel. Influence of temperature 239
aqueous solution 153	Magnetic moment
IR spectral studies	Preparation and structural studies of a new series
3d-metal complexes of salicylaldehyde ethoxy-	of bimetallic complexes 163
thiocarbonyl hydrazone 173	Magnetism 163
Isomeric acetylpyridines	
Effect of ring aza substitution on the luminescence	Predictive character of solid state chemistry:
of aromatic ketones. Luminescence of isomeric	Relation between structure, chemical bonding and
a material constitution of	physical properties of solids
Isotopic invariants 47	Magnetogyration
Isotopic invariants Isotopic invariants of pyramidal symmetrical XY ₃	Electron- and magnetogyration 421
molecules and evaluation of molecular constants	Manganese(II)
	Manganese(II) complexes of some nitrogen-
211	oxygen and nitrogen-sulphur donor ligands 249

Mass spectra	Neighbourhood principle
Synthesis and characterisation of some novel β -	The phase problem of x-ray crystallography
aminodiketones 189	291
Matrix interaction	Neutron
EPR studies of phosphine photofragments in can- crinite matrix at 77 K	Neutron diffraction using an electron linear
Maximum entropy	accelerator 415 Neutron diffraction
Maximum entropy—A new approach to the crys-	The phase problem in neutron diffraction 403
tallographic phase problem 341	Neutron diffraction using an electron linear
Mean amplitudes of vibrations	accelerator 415
Isotopic invariants of pyramidal symmetrical XY ₃	Macromolecular crystallography research at
molecules and evaluation of molecular constants	Trombay 497
211	Niobium pentachloride
Mechanical compatibility	Synthesis and characterization of hexa, hepta and
Polymer alloys: Science and practice 623	octa-coordinated Nb(V) complexes of N,N'-
Metal complexes	(substituted)-formamidino-N'-(substituted) car-
Copolymers and their polychelates derived from	bamides and thiocarbamides 605 Non-covalent interactions
hydroxy benzoic (o- and p-) acids as antifungal and antibacterial agents 271	Structure and interactions of aspirin-like drugs
Metal insulator transition	463
X-ray photoelectron and Auger studies of	Non-linear materials
$Ag_{2+\delta}$ S 43	Predictive character of solid state chemistry:
Metal-nucleotide complexes	Relation between structure, chemical bonding and
X-ray structural studies on metal complexes with	physical properties of solids 1
nucleotides and pyridoxal-amino acid Schiff	Non-newtonian
bases. Models for platinum binding to DNA and	Whither polymer engineering 639
pyridoxal catalyzed reactions 485	Nuclear magnetic resonance
Metal Schiff base complexes	3d-metal complexes of salicylaldehyde ethoxy-
X-ray structural studies on metal complexes with	thiocarbonyl hydrazone 173
nucleotides and pyridoxal-amino acid Schiff	Synthesis and characterisation of some novel β -
bases. Models for platinum binding to DNA and	aminodiketones 189
pyridoxal catalyzed reactions 485	Numerical analysis
Micellar catalysis	A theoretical consideration of the intermediate phase in α - β transition of quartz 429
Micellar catalysed oxidative cyclisation of 1,3,5- triaryl formazan 283	phase in α - β transition of quartz 429
triaryl formazan 283 Mixed-ligand complexes	Octahydronaphthalene
Polarographic study of mixed ligand complexes of	The crystal structure of 5α - cyano-3-keto-10-
Pb(II) with ethylenediamine-malonate and pro-	methyl-octahydronaphthalene 279
pylene-diamine-malonate 77	O,O-Diethylphosphonyldithiocarbamate
Polarographic study of mixed ligand complexes:	Oxotransition metal complexes of O,O-
Pb(II)-succinate-imidazole system 91	diethylphosphonyldithiocarbamate 73
Stability of mixed ligand complexes of copper(II):	Optical absorption edge
ESR studies 113	Photoacoustic spectra of As ₂ S ₃ —As ₂ Se ₃ glasses
Molecular complexes	65
Viscometry in the study of molecular complexes	Optical birefringence
147	Optical birefringence in a fluid near its critical point with stratification under gravity 543
Molecular vibrations	Politic Management Branch
Anharmonic molecular vibrations 563	Optical properties Predictive character of solid state chemistry:
Monodentate	Relation between structure, chemical bonding and
Infrared spectral evidence for mono-, bi- and tetra-dentate behaviour of hexamethylene-	physical properties of solids 1
tetramine 59	Optical rotatory dispersion
Monomer	Chiral synthesis of optically active $S(+)-2,6,7,7a-$
Structural changes in the monomeric despenta-	tetrahydro-1β-hydroxy-4-formyl-7aβ-methylin-
peptide (B30-B26) insulin crystal 473	dene 181
Monte-Carlo simulation	Organometallic reactions
An assessment of criteria of fit in Patterson search	Reactions of silylated Schiff bases with organo-
329	titanium(IV) and organotin(IV) chlorides 257
	Organotin
Nb(V) naphthoxides	Reactions of silylated Schiff bases with organo-
Synthesis and characterization of hexa, hepta and	titanium(IV) and organotin(IV) chlorides 257
octa-coordinated Nb(V) complexes of N,N'-	Organotitanium
(substituted)-formamidino-N'-(substituted) car-	Reactions of silylated Schiff bases with organo-
bamides and thiocarbamides 605	titanium(IV) and organotin(IV) chlorides 257

Oscillatory reaction	random approach 323
Uncatalysed oscillations in the bromate-pyro-	Phenylmethylcarbinols
gallol system 221	Oxidation of phenylmethylcarbinols by bromam-
Oxidation	ine- <i>T</i> 107
Oxidation of phenylmethylcarbinols by bromam-	Phosphine
ine- <i>T</i> 107	EPR studies of phosphine photofragments in can-
Oxidative cyclisation	crinite matrix at 77 K 597
Micellar catalysed oxidative cyclisation of 1,3,5-	Photoacoustic spectroscopy
triaryl formazan 283	Photoacoustic spectra of As ₂ S ₃ —As ₂ Se ₃ glasses
Oxomolybdenum(V)	65
Oxotransition metal complexes of O,O-diethyl-	Photochemical reaction
phosphonyl-dithiocarbamate 73	Effect of ring aza substitution on the luminescence
Oxoniobium(V)	of aromatic ketones. Luminescence of isomeric
Oxotransition metal complexes of O,O-diethyl-	acetylpyridines 47
phosphonyl-dithiocarbamate 73	p-hydroxybenzoic acid
Oxotungsten(V,VI)	Copolymers and their polychelates derived from
Oxotransition metal complexes of O,O-diethyl-	hydroxy benzoic (o- and p-) acids as antifungal
phosphonyl-dithiocarbamate 73	and antibacterial agents 271
Oxouranium(VI)	Polarographic study
Oxotransition metal complexes of O,O-diethyl-	Polarographic study of mixed ligand complexes:
phosphonyl-dithiocarbamate 73	Pb(II)-succinateimidazole system 91
Oxovanadium(IV)	Poly electrolytic complex
Oxotransition metal complexes of O,O-diethyl-	Anomalous dielectric dispersion in glycolchito-
phosphonyl-dithiocarbamate 73	san-carboxy methyl cellulose poly-electrolyte
phosphonyr diamoeurodiamato	complex containing alkali ions 551
	Polyethylene terephthalate
Parachloro benzyl cyanide	Simulation and optimization of polyethylene tere-
Electronic spectra of paramethoxy benzyl alcohol	phthalate (PET) reactors 673
and parachloro benzyl cyanide 197	Polymer alloys
Paramethoxy benzyl alcohol	Polymer alloys: Science and practice 623
Electronic spectra of paramethoxy benzyl alcohol	Polymer engineering
and parachloro benzyl cyanide 197	Whither polymer engineering 639
Patterson method	Polymerization propylene
The phase problem in neutron diffraction 403	Recent advances in the polymerisation of propyl-
Patterson search	ene 613
An assessment of criteria of fit in Patterson search	Polymerization reactors
329	Simulation and optimization of polyethylene tere-
p-benzoquinone	phthalate (PET) reactors 673
On the vibrational structure involving C=O	Polymer processing
stretch in the vapour phase phosphorescence of p-	Whither polymer engineering 639
benzoquinone- h_4 and $-d_4$ 127	Polymorphism
Penicillum islandicum	On the polymorphism of the smectic A phases of
Copolymers and their polychelates derived from	highly polar compounds 509
hydroxy benzoic (o- and p-) acids as antifungal	Polymer-polymer miscibility
and antibacterial agents 271	Polymer alloys: Science and practice 623
Perchloric acid-pyrogallol system	Polymer science
Uncatalysed oscillations in the bromate-pyro-	Whither polymer engineering 639
gallol system 221	Positive cooperativity
Periodic crystallisation	Micellar catalysed oxidative cyclisation of 1,3,5-
Periodic crystallisation of magnesium hydroxide	triaryl formazan 283
in agar agar gel. Influence of temperature 239	Presynaptic toxins
Periodic reaction	Macromolecular crystallography research at
Uncatalysed oscillations in the bromate-pyro-	Trombay 497
gallol system 221	Primary extinction
Phase diagram morphology	Extinction correction and synchrotron radiation
Polymer alloys: Science and practice 623	359
Phase problem	Probability distribution
The phase problem of x-ray crystallography	The probability of large structure amplitudes: The
291	space group PI 335
Maximum entropy—A new approach to the crys-	Propylenediamine malonate ion
tallographic phase problem 341	Polarographic study of mixed ligand complexes of
Phase sets	Pb(II) with ethylenediamine-malonate and pro-
The efficient generation of phase sets by the	pylene-diamine-malonate 77
The second of the	ry diameter indicate

Later and the la	
Prostaglandin biosynthesis	hydroxy benzoic (o- and p-) acids as antifungal
Structure and interactions of aspirin-like drugs	and antibacterial agents 271
463	Salicylaldehyde ethoxythiocarbonyl hydrazone
Protein crystallography	3d-metal complexes of salicylaldehyde ethoxy-
Macromolecular crystallography research at	thiocarbonyl hydrazone 173
Trombay 497	Salt effect
Pt(II)-DNA interaction	Role of salt effect and absorption on the
X-ray structural studies on metal complexes with	Liesegang ring formation of lanthanum molyb-
nucleotides and pyridoxal-amino acid Schiff	date 233
bases. Models for platinum binding to DNA and	Schwartz's equation
pyridoxal catalyzed reactions 485 Puckering	Anomalous dielectric dispersion in
Anharmonic molecular vibrations 563	glycolchitosancarboxy methyl cellulose poly-
Push-pull ethylenes	electrolyte complex containing alkali ions 551 Seebeck coefficient
Crystallographic study of push-pull ethylenes	Structural, electrical and reflectance studies of the
449	system $Z_1M_{2-2x}N_i T_i O_4$ 139
Pyramidal XY ₃ molecules	Sheet silicates
Isotopic invariants of pyramidal symmetrical XY ₃	The principles of chemical conversion of organic
molecules and evaluation of molecular constants	molecules using sheet silicate intercalates 27
211	Signal detection
Pyrazole derivatives	An assessment of criteria of fit in Patterson search
Structure and interactions of aspirin-like drugs	329
463	Silver sulfide
Pyridoxal amino acid Schiff bases	X-ray photoelectron and Auger studies of
X-ray structural studies on metal complexes with	$Ag_{2+\delta} S 43$
nucleotides and pyridoxal-amino acid Schiff	Silylated schiff bases
bases. Models for platinum binding to DNA and	Reactions of silylated Schiff bases with organo-
pyridoxal catalyzed reactions 485	titanium(IV) and organotin(IV) chlorides
Pyrrolidine dithiocarbamate	Simulation
Crystal and molecular structure of pyrrolidine	Simulation and optimization of polyethylene tere-
dithiocarbamate cobalt(III) chelate 437	phthalate (PET) reactors 673
	Six accordingto actohodral
Radical scavenging	Six coordinate octahedral
Radical scavenging Structural evidence for the radical scavenging	Manganese(II) complexes of some nitrogen-
Structural evidence for the radical scavenging	Manganese(II) complexes of some nitrogen- oxygen and nitrogen-sulphur donor ligands 249
	Manganese(II) complexes of some nitrogen- oxygen and nitrogen-sulphur donor ligands 249 Smectic A
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-	Manganese(II) complexes of some nitrogen- oxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457	Manganese(II) complexes of some nitrogen- oxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Radioprotectants	Manganese(II) complexes of some nitrogen- oxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Radioprotectants Structural evidence for the radical scavenging	Manganese(II) complexes of some nitrogen- oxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach	Manganese(II) complexes of some nitrogen- oxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach The efficient generation of phase sets by the	Manganese(II) complexes of some nitrogen- oxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach The efficient generation of phase sets by the random approach 323	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach The efficient generation of phase sets by the random approach 323 Reentrant phases	Manganese(II) complexes of some nitrogen- oxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach The efficient generation of phase sets by the random approach 323 Reentrant phases On the polymorphism of the smectic A phases of	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach The efficient generation of phase sets by the random approach 323 Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds 509	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry:
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Reflectance spectra	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Reflectance spectra Structural, electrical and reflectance studies of the	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry:
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ 139	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants As a some aminothiol group of radio-protectants The efficient generation of phase sets by the random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series
Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radio-protectants 457 Random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propyl-	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes 163
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants At 7 Random approach The efficient generation of phase sets by the random approach The efficient generation of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes 163 Solid phase spectrum
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Random approach The efficient generation of phase sets by the random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Reflectance spectra Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes 163 Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Random approach The efficient generation of phase sets by the random approach The efficient generation of phase sets by the random approach Structural phases On the polymorphism of the smectic A phases of highly polar compounds Reflectance spectra Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect The phase problem in neutron diffraction 403	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds 509 Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes 163 Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide 197
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Random approach The efficient generation of phase sets by the random approach The plases On the polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect The phase problem in neutron diffraction 403 Resonance modulated diffraction	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide 197 Spacing coefficient
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants A57 Random approach The efficient generation of phase sets by the random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Reflectance spectra Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect The phase problem in neutron diffraction 403 Resonance modulated diffraction The phase problem in neutron diffraction 403	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide 197 Spacing coefficient Periodic crystallisation of magnesium hydroxide
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Random approach The efficient generation of phase sets by the random approach The plases On the polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect The phase problem in neutron diffraction 403 Resonance modulated diffraction	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide 197 Spacing coefficient Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect The phase problem in neutron diffraction	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes 163 Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide 197 Spacing coefficient Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Spherical crystals
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Random approach The efficient generation of phase sets by the random approach The polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect The phase problem in neutron diffraction The phase problem in neutron diffraction diffraction	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide 197 Spacing coefficient Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect The phase problem in neutron diffraction	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes 163 Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide 197 Spacing coefficient Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Spherical crystals Extinction correction and synchrotron radiation 359
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants A57 Random approach The efficient generation of phase sets by the random approach The efficient generation of phase sets by the random approach Reentrant phases On the polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect The phase problem in neutron diffraction The phase problem in neutron diffraction The phase problem in neutron diffraction Rheology Whither polymer engineering 639 Rotational barriers Crystallographic study of push-pull ethylenes	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates The principles of chemical conversion of organic molecules using sheet silicate intercalates S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide 197 Spacing coefficient Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Spherical crystals Extinction correction and synchrotron radiation 359
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Random approach The efficient generation of phase sets by the random approach The polymorphism of the smectic A phases of highly polar compounds Structural, electrical and reflectance studies of the system ZnMn _{2-2x} Ni _x Ti _x O ₄ Regioselectivity Recent advances in the polymerisation of propylene 613 Renninger effect The phase problem in neutron diffraction The phase problem in neutron diffraction diffraction	Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Smectic A On the polymorphism of the smectic A phases of highly polar compounds Smectites The principles of chemical conversion of organic molecules using sheet silicate intercalates 27 S N interaction Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants 457 Soft chemistry Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids 1 Softness values Preparation and structural studies of a new series of bimetallic complexes 163 Solid phase spectrum Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide 197 Spacing coefficient Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Spherical crystals Extinction correction and synchrotron radiation 359

Spinel	properties of di-N-isothiocynatodihydrazine
Structural, electrical and reflectance studies of the	metal(II) 83
$system ZnMn_{2-2x}Ni_xTi_xO_4$ 139	Thermodynamics
Stability	Thermodynamics of exchange in clays: Ion ex-
Stability of mixed ligand complexes of copper(II):	change equilibria of transition metals and sodium
ESR studies 113	ions on mite
Stereospecificity	Thiazolidinone
Recent advances in the polymerisation of propyl-	Addition products of dimethyl acetylenedicar-
ene 613	boxylate to thioureas-studies on 2-(p-bromo-
Stratified media	phenyl) imino-3-methyl-5-carbomethoxymethyl-idenethiazolidin-(4)-one
Optical birefringence in a fluid near its critical	deficiting of the
point with stratification under gravity 543	Thiocarbamides
Structural bonding	Synthesis and characterization of hexa, hepta and octa-coordinated Nb(V) complexes of N,N'-
Predictive character of solid state chemistry:	(substituted)-formamidino-N'-(substituted) car-
Relation between structure, chemical bonding and	bamides and thiocarbamides 605
physical properties of solids 1	Thiocyanate 500
Structure amplitudes	Preparation and structural studies of a new series
The probability of large structure amplitudes: The space group $P\bar{1}$ 335	of bimetallic complexes 163
Space Brook	Thiosemicarbazone complexes
Structure invariants The phase problem of x-ray crystallography	Manganese(II) complexes of some nitrogen-
291	oxygen and nitrogen-sulphur donor ligands 249
Succinate imidazole system	Thiourea
Polarographic study of mixed ligand complexes:	Addition products of dimethyl acetylenedicar-
Pb(II)-succinateimidazole system 91	boxylate to thioureas-studies on 2-(p-bromophe-
Structural, electrical and reflectance studies of the	nyl) imino-3-methyl-5-carbomethoxymethyl-
system $ZnMn_{2-2x}Ni_xTi_xO_4$ 139	idenethiazolidin-(4)-one
Sulphonated resin catalysts	Transfer equations
Sulphonated macroporous resin catalysts: Studies	Extinction correction and synchrotron radiation
on the dehydration of 2-butanol 227	359
Superionic conductivity	Transition metals
Predictive character of solid state chemistry:	Thermodynamics of exchange in clays: Ion ex-
Relation between structure, chemical bonding and	change equilibria of transition metals and sodium
physical properties of solids 1	ions on illite 589
Symmetry	Triplet-singlet transition
Preparation and structural studies of a new series	On the vibrational structure involving C=O
of bimetallic complexes 163	stretch in the vapour phase phosphorescence of p-
Synergistic extraction	benzoquinone- h_4 and $-d_4$ 127
Effect of several auxiliary ligands on the extrac-	
tion of cadmium(II) with 2-thenoyltrifluoro-	Uncatalysed oscillations
acetone 167	Uncatalysed oscillations in the bromate-pyro-
T	gallol system 221
Tetra-aza macrocyclic complexes	Uv vapour absorption spectra
Synthesis and characterisation of some novel- β	The near uv vapour absorption spectra of 1-
aminodiketones 189 Tetradentate	hydroxynaphthalene and 2-hydroxynaphthalene
Infrared spectral evidence for mono- bi- and tetra-	Vanous about about a 133
dentate behaviour of hexamethylenetetramine	Vapour phase phosphorescence On the vibrational structure involving C=O
59	
Tetragonal	stretch in the vapour phase phosphorescence of p - benzoquinone- h_4 and $-d_A$ 127
Preparation and structural studies of a new series	Velocity constant
of bimetallic complexes 163	Periodic crystallisation of magnesium hydroxide
Thenoyltrifluoroacetone	in agar agar gel. Influence of temperature 239
Effect of several auxiliary ligands on the extrac-	Vibrational analyses
tion of cadmium(II) with 2-thenoyltrifluoro-	The near UV vapour absorption spectra of 1-
acetone 167	hydroxynaphthalene and 2-hydroxynaphthalene
Theoretical approaches	133
Mathematical methods for the analysis of charge	Vibrational structure
densities from x-ray diffraction 379	On the vibrational structure involving C=O
Thermal compatibility	stretch in the vapour phase phosphorescence of p-
Polymer alloys: Science and practice 623	benzoquinone- h_4 and $-d_4$ 127
Thermal decomposition	Vibronic interaction
Preparation, characterization and thermal	Effect of ring aza substitution on the luminescence

Viscometry Viscometry in the study of molecular complexes	nucleotides and pyridoxal-amino acid Schiff bases. Models for platinum binding to DNA and pyridoxal catalyzed reactions 485 X-ray diffraction
17/	Mathematical methods for the analysis of charge
Weak interacting systems Viscometry in the study of molecular complexes 147	densities from x-ray diffraction 379 Macromolecular crystallography research at Trombay 497
Xanthomonas citri	X-ray photoelectron spectra X-ray photoelectron and Auger studies of
Copolymers and their polychelates derived from	As $Ag_{2+\delta}S$ 43
hydroxy benzoic (o- and p-) acids as antifungal	X-ray spectra
and antibacterial agents 271	XANES and EXAFS of copper compounds: Studies of
XANES XANES and EXAFS of copper compounds: Studies of copper carboxylates with metal-metal bonds of	copper carboxylates with metal-metal bonds of the complex formed by <i>Pseudomonas aeruginosa</i> 527
the complex formed by Pseudomonas aeruginosa	X-ray structure analysis
527	Crystallographic study of push-pull ethylenes
X-ray Structural, electrical and reflectance studies of the	449
system $Z_1Mn_{2-2x}Ni_xTi_xO_4$ 139	
X-ray crystallography	Zeolite
Determination of one-dimensional crystal struc- tures using the double Patterson function 385	EPR studies of phosphine photofragments in can- crinite matrix at 77 K 597
AUTHOR INDEX	(Chemical Sciences)
AUTHOR INDEX Adhikesavalu D Crystallographic study of push-pull ethylenes 449	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetra-	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S Periodic crystallisation of magnesium hydroxide	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogen-
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S Periodic crystallisation of magnesium hydroxide	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Balakrishnan R	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Balakrishnan R Micellar catalysed oxidative cyclisation of 1,3,5-	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S Optical birefringence in a fluid near its critical
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Balakrishnan R Micellar catalysed oxidative cyclisation of 1,3,5-triaryl formazan 283	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Balakrishnan R Micellar catalysed oxidative cyclisation of 1,3,5-	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S Optical birefringence in a fluid near its critical point with stratification under gravity 543 Chidambaram R see Kannan K K 497
Adhikesavalu D Crystallographic study of push-pull ethylenes 449 Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Balakrishnan R Micellar catalysed oxidative cyclisation of 1,3,5-triaryl formazan 283 Ballantine A James see Jones William 27 Baneriee D K	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S Optical birefringence in a fluid near its critical point with stratification under gravity 543 Chidambaram R see Kannan K K 497 Chinnappan V A
Adhikesavalu D Crystallographic study of push-pull ethylenes Aggarwal R C see Singh N K Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Balakrishnan R Micellar catalysed oxidative cyclisation of 1,3,5-triaryl formazan 283 Ballantine A James see Jones William 27 Banerjee D K Chiral synthesis of optically active S(+)-2,6,7,7a-tetrahydro-1β-hydroxy-4-formyl-7aβ-methylin-	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S Optical birefringence in a fluid near its critical point with stratification under gravity 543 Chidambaram R see Kannan K K 497
Adhikesavalu D Crystallographic study of push-pull ethylenes Aggarwal R C see Singh N K 173 Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine 59 Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature 239 Balakrishnan R Micellar catalysed oxidative cyclisation of 1,3,5-triaryl formazan 283 Ballantine A James see Jones William 27 Banerjee D K Chiral synthesis of optically active S(+)-2,6,7,7a-tetrahydro-1β-hydroxy-4-formyl-7aβ-methylindene	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P 227 Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S Optical birefringence in a fluid near its critical point with stratification under gravity 543 Chidambaram R see Kannan K K 497 Chinnappan V A
Adhikesavalu D Crystallographic study of push-pull ethylenes Aggarwal R C see Singh N K Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature Balakrishnan R Micellar catalysed oxidative cyclisation of 1,3,5-triaryl formazan Ballantine A James see Jones William 27 Banerjee D K Chiral synthesis of optically active S(+)-2,6,7,7a-tetrahydro-1β-hydroxy-4-formyl-7aβ-methylindene Bansal O P Thermodynamics of exchange in clays: Ion ex-	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S Optical birefringence in a fluid near its critical point with stratification under gravity Chidambaram R see Kannan K K 497 Chinnappan V A see Natarajan A 211 Darshane V S see Mulla B A
Adhikesavalu D Crystallographic study of push-pull ethylenes Aggarwal R C see Singh N K Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature Balakrishnan R Micellar catalysed oxidative cyclisation of 1,3,5-triaryl formazan Ballantine A James see Jones William 27 Banerjee D K Chiral synthesis of optically active S(+)-2,6,7,7a-tetrahydro-1β-hydroxy-4-formyl-7aβ-methylindene 181 Bansal O P Thermodynamics of exchange in clays: Ion exchange equilibria of transition metals and sodium	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S Optical birefringence in a fluid near its critical point with stratification under gravity Chidambaram R see Kannan K K 497 Chinnappan V A see Natarajan A 211 Darshane V S see Mulla B A Dauter Zbigniew
Adhikesavalu D Crystallographic study of push-pull ethylenes Aggarwal R C see Singh N K Ahuja I S Infrared spectral evidence for mono-, bi- and tetradentate behaviour of hexamethylenetetramine Ambrose S Periodic crystallisation of magnesium hydroxide in agar agar gel. Influence of temperature Balakrishnan R Micellar catalysed oxidative cyclisation of 1,3,5-triaryl formazan Ballantine A James see Jones William 27 Banerjee D K Chiral synthesis of optically active S(+)-2,6,7,7a-tetrahydro-1β-hydroxy-4-formyl-7aβ-methylindene Bansal O P Thermodynamics of exchange in clays: Ion ex-	Bharati Bhattacharjee Viscometry in the study of molecular complexes 147 Bhat S N see Bharati Bhattacharjee 147 Chakrabarty D K see Sivanand S P Chakravorti S see Sarkar A K 197 Chandra Sulekh Manganese(II) complexes of some nitrogenoxygen and nitrogen-sulphur donor ligands 249 Chatterjee S Optical birefringence in a fluid near its critical point with stratification under gravity Chidambaram R see Kannan K K 497 Chinnappan V A see Natarajan A 211 Darshane V S see Mulla B A

of aromatic ketones. Luminescence of isomeric X-ray structural studies on metal complexes with

Dey K	Trombay 497
Reactions of silvlated Schiff bases with organo-	Kartha Gopinath
titanium(IV) and organotin(IV) chlorides 257	Crystal and molecular structure of pyrrolidine
Dodson Guy	dithio carbamate cobalt(III) chelate 437
see Ru Chang Bi 473	Kartha G
	see Nagarajan K 99
Eleanor Dodson	Kastha G S
see Ru Chang Bi 473	see Sarkar S K 47
	Kasturi T R
Ganguly P	see Banerjee D K
see Somasundaram T 65	Kato N
Garg J K	A theoretical consideration of the intermediate
Polarographic study of mixed ligand complexes of	phase in α - β transition of quartz 429
Pb(II) with ethylenediaminemalonate and propyl-	Kaushik N K
enediaminemalonate 77	see Khera B 73
Gopal E S R	Khera B
bee Charles 300 b	Oxotransition metal complexes of O,O-diethyl-
Gordiano Federico see Ru Chang Bi 473	phosphonyl-dithiocarbamate 73
see Ru Chang Bi 473 Goshal S K	Koner D see Dev K 257
see Sarkar S K 47	500 200 12
Gowda D S Sake	Krishnamurthy Kotra V see Kartha Gopinath 437
see Puttaraja 279	ore remains or printers
Gnanam F D	Kumar Yogendra see Chandra Sulekh 249
see Ambrose S 239	Kurien K V
Gunasekaran S	***************************************
Oxidation of phenylmethylcarbinols by bromam-	Role of salt effect and absorption on the Liesegang ring formation of lanthanum molyb-
ine-T 107	date 233
Gupta K Santosh	date 255
Simulation and optimization of polyethylene tere-	Lahiri Roma
phthalate (PET) reactors 673	see Rao G N
F	
Hagenmuller P	Madhok K L
Predictive character of solid state chemistry:	Synthesis and characterization of hexa, hepta and
Relation between structure, chemical bonding and	octa-coordinated Nb(V) complexes of N,N'-
physical properties of solids 1	(substituted)-formamidino-N'-(substituted) car-
Hauptman Herbert	bamides and thiocarbamides 605
The phase problem of x-ray crystallography	Madhusudana N V
291	On the polymorphism of the smectic A phases of
Henderson K	highly polar compounds 509
The efficient generation of phase sets by the	Main Peter
random approach 323	Determination of one-dimensional crystal struc-
Hill O John	tures using the double Patterson function 385
see Roe P Stephen 189	Mallick P K
Hubbard Rod	see Sarkar A K 197
see Ru Chang Bi 473	Manavalan R
	see Patel M M 271
Ittyachen M A	Manohar H
see Kurien K V 233	see Poojary M Damodara 485
Jain D S	Mani A
	see Kalyani Vijayan 457
see Garg J K 77 Jones William	Mashelkar R A
	Whither polymer engineering 639
The principles of chemical conversion of organic molecules using sheet silicate intercalates 27	Maslen E N
molecules using sheet silicate intercalates 27	Electron density distribution in potassium bis-
Kalidas C	(carbonato) cuprate(II) 443
see Sivaprasad P 203	Miller A Foil
Kalyani Vijayan	Very anharmonic molecular vibrations 563 Mulla B A
Structural evidence for the radical scavenging	
mechanism of some aminothiol group of radio-	Structural, electrical and reflectance studies of the
protectants 457	system $ZnMn_{2-2x}Ni_xTi_xO_4$ 139
Kannan K K	Nadkarni M Vikas
Macromolecular crystallography research at	
at at	Polymer alloys: Science and practice 623

Index хi

Nagarajan K	Purnell J Howard
Addition products of dimethyl acetylenedicar-	see Jones William 27
boxylate to thioureas-studies on 2- (p-bromophe-	Pushpa Viswanathan
nyl) imino-3-methyl-5-carbomethoxymethyl-	see Srinivasan R 551
idenethiazolidin(4)-one 99	Puttaraja
Nair M D	The crystal structure of 5α-cyano-3-keto-10-
see Nagarajan K 99 Narayan Ramesh	methyl octahydronaphthalene 279
Maximum entropy—A new approach to the crys-	Dachauer D.C.
tallographic phase problem 341	Raghavan P S see Balakrishna R 283
Natarajan A	
Isotopic invariants of pyramidal symmetrical XY ₃	Raghunathan P
molecules and evaluation of molecular constants	EPR studies of phosphine photofragments in can- crinite matrix at 77 K 597
211	Ramanathan S
Natarajan C	see Ramaswamy R 221
Stereochemistry of copper(II), nickel(II) and	Ramasamy P
cobalt(II) 2'-hydroxy-5'-X-chalconeoxime com-	see Ambrose S 239
plexes 265	Ramaswamy R
Nirupa U Kamath	Uncatalysed oscillations in the bromate-pyro-
see Adhikesavalu D 449	gallol system 221
Niogy B K	Rao C N R
Kinetics and mechanism of anation of	see Sarode P R 527
hydroxopenta-aquo chromium(III) ion by DL-	Rao G N
alanine in aqueous solution 153	Effect of several auxiliary ligands on the extrac-
Nityananda Rajaram	tion of cadmium(II) with 2-thenoyltrifluoro-
see Narayan Ramesh 341	acetone (TTA) 167
Nordman C E	Rao K J
An assessment of criteria of fit in Patterson search	see Somasundaram T 65
329	Rao S P Sudhakara
	see Poojary M Damodara 485
Ojha T N	Rasmussen Svend Erik
Preparation and structural studies of a new series	Precision of determination of d-spacings using a
of bimetallic complexes 163	Guinier camera 397
	Ray S
Palaniandavar M	see Dey K 257
see Natarajan C 265	Reynolds Colin
Pandey V N	see Ru Chang Bi 473
On the vibrational structure involving C=O	Roe P Stephen
stretch in the vapour phase phosphorescence of p-	Synthesis and characterization of some novel β - aminodiketones 189
benzoquinone- h_4 and $-d_4$ 127	aminodiketones 189 Row T N Guru
The near UV vapour absorption spectra of 1-	Mathematical methods for the analysis of charge
hydroxynaphthalene and 2-hydroxynaphthalene	densities from x-ray diffraction 379
133	Ru Chang Bi
Patel C C	Structural changes in the monomeric despenta-
see Patil K C 83	peptide (B30-B26) insulin crystal 473
Patel M M	popular (250 250) mount on joint
Copolymers and their polychelates derived from	
hydroxy benzoic (o- and p-) acids as antifungal	Sankar G
and antibacterial agents 271	see Shukla A K 43
Patil K C	see Sarode P R 527
Preparation, characterization and thermal	Sarkar A
properties of di-N-isothiocyanatodihydrazine	see Banerjee D K
metal(II) 83	Sarkar A K
Poojary M Damodara	Electronic spectra of paramethoxy benzyl alcohol
X-ray structural studies on metal complexes with	and parachloro benzyl cyanide 197
nucleotides and pyridoxal amino acid Schiff bases.	Sarkar S K
Models for platinum binding to DNA and pyri-	Effect of ring aza substitution on luminescence of
doxal catalyzed reactions 485	aromatic ketones. Luminescence of isomeric
Prabhakaran K	dectypyridines
see Patel M M 271	Sarma D D see Shukla A K 43
Prabhananda B S	Sarode P R
Stability of mixed ligand complexes of copper(II):	XANES and EXAFS of copper compounds: Studies of
ESR studies 113	AANES and EAAFS of copper compounds, Studies of

Nagarajan K

copper carboxylates with metal-metal bonds of the complex formed by <i>Pseudomonas aeruginosa</i>	Sur S K see Raghunathan P 59
527	
Sharma S B	Tennakoon B
see Ojha T N 163	see Jones William 2
Shenoy S J	Thakur S N
see Nagarajan K 99	see Pandey V N 12
Shivhare Madhu	see Pandey V N 133
Polarographic study of mixed ligand complexes:	Thomas M John
Pb(II)-succinate-imidazole system 91	see Jones William 2
Shukla A K	Tilak D
X-ray photoelectron and Auger studies of	see Jones William 2
$Ag_{2+\delta}S$ 43	
Sikka S K	Vaidyan V K
The phase problem in neutron diffraction 403	see Kurien K V 233
Singh Mukhtar	Vani G V
see Shivhare Madhu 91	see Narayan Ramesh 34
Singh N K	Vedavathi B M
3d-metal complexes of salicylaldehyde ethoxy-	see Kalyani Vijayan 45'
thiocarbonyl hydrazone 173	Venkatasubramanian N
Singh Raghuvir	see Gunasekaran S 10'
see Ahuja I S 59	Venkatesan K
Singh R S	see Adhikesavalu D 449
see Sivanand S P 227	Verma P S
Sivanand S P	see Garg J K
Sulphonated macroporous resin catalysts: Studies	Vijayan M
on the dehydration of 2-butanol	Structure and interactions of aspirin-like drugs
Sivaprasad P	463
Conductance behaviour of HCl in water-ethylene	Vittal J P
glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures 203	see Patil K C
glycol-diethylene glycol mixtures 203 Sivaram S	Vlokh O G
Recent advances in the polymerisation of pro-	see Zheludev I S 42
pylene 613	Watson K J
Sodhi G S	see Maslen E N 44
see Khera B 73	Williamson J Laurice
Somasundaram T	see Jones William 2
Photoacoustic spectra of As ₂ S ₃ —As ₂ Se ₃ glasses	Willis B T M
65	Neutron diffraction using an electron linear accel
Spadaccini N	erator 41
see Maslen E N 443	Wilson A J C
Srinivasan R	The probability of large structure amplitudes: The
Anomalous dielectric dispersion in glycolchito-	space group PT 33.
sancarboxy methyl cellulose poly-electrolyte com-	Woolfson M M
plex containing alkali ions 551	see Henderson K 32
Srinivasan Vangalur S	See Henderson K
see Balakrishnan R 283	
Srivastava S C	Yadava C L
see Singh N K 173	see Ahuja I S
Suortti P	
Extinction correction and synchrotron radiation	Zheludev I S
359	electro- and magnetogyration 42

Proceedings of the Indian Academy of Sciences

Volume 92, 1983

CONTENTS (Chemical Sciences)

Inorganic and Analytical

The state of the s	
Oxotransition metal complexes of O,O-diethylphosphonyl-dithiocarba- mate B Khera, G S Sodhi and N K Kaushik	73–76
Polarographic study of mixed ligand complexes of Pb(II) with ethylene- diamine-malonate and propylene-diamine-malonate J K Gard, P S Verma and D S Jain	77–82
J K Gara, F S verma ana D S Jain	11-82
Preparation, characterization and thermal properties of di-N-isothio- cyanato-dihydrazine metal(II) KC Patil, J P Vittal and C C Patel	83–89
Polarographic study of mixed ligand complexes: Pb(II)-succinate- imidazole system Madhu Shivhare and Mukhtar Singh	91–97
Kinetics and mechanism of anation of hydroxopenta-aquo chromium(III) ion by DL-alanine in aqueous solution B.K. Niogy and G.S. De	153-161
Preparation and structural studies of a new series of bimetallic complexes T N Ojha and S B Sharma	163-166
Effect of several auxiliary ligands on the extraction of cadmium(II) with 2-thenoyl-trifluoroacetone (TTA) G N Rao and Roma Lahiri	167-172
3d-metal complexes of salicylaldehyde ethoxythiocarbonyl hydrazone N K Singh, S C Srivastava and R C Aggarwal	173-179
Manganese(II) complexes of some nitrogen-oxygen and nitrogen sulphur donor ligands Sulekh Chandra and Yogendra Kumar	249-255
Reactions of silylated Schiff bases with organotitanium(IV) and organotin(IV) chlorides K Dey, S Ray and D Koner	257-264
Stereochemistry of copper(II), nickel(II) and cobalt(II) 2'-hydroxy-5'-X-chalconeoxime complexes C Natarajan and M Palaniandavar	265-270
Copolymers and their polychelates derived from hydroxy benzoic (o- and p-) acids as antifungal and antibacterial agents	
M M Patel, R Manavalan and K Prabhakaran	271-278
Synthesis and characterisation of hexa, hepta and octa-coordinated Nb(V) complexes of N,N'-(substituted) formamidino-N'-(substituted) carbamides and thiocarbamides K L Madhok	605-612
Organic	
Addition products of dimethyl acetylenedicarboxylate to thioureas—studies on 2-(p-bromophenyl) imino-3-methyl-5-carbomethoxy-methylidene-thiazolidin-(4)-one	
K Nagarajan, M D Nair, S J Shenoy and G Kartha	99-106

S Gunasekaran and N Venkatasubramanian

107-112

Oxidation of phenylmethylcarbinols by bromamine-T

ii Contents

Chiral synthesis of optically active $S(+)$ -2,6,7,7a-tetra-nydro-1-nydroxy-4-formyl-7 $\alpha\beta$ -methylindene D K Banerjee, T R Kasturi and A Sarkar	181-187
Synthesis and characterization of some novel β -aminodiketones Stephen P Roe and John O Hill	189-196
The crystal structure of 5α-cyano-3-keto-10-methyl-octahydronaphthalene Puttaraja and D S Sake Gowda	279-282
Micellar catalysed oxidative cyclisation of 1,3,5-triaryl formazans R Balakrishnan, P S Raghavan and Vangalur S Srinivasan	283-290
Physical and Theoretical	
Predictive character of solid state chemistry: Relation between structure, chemical bonding and physical properties of solids P Hagenmuller	1-26
The principles of chemical conversion of organic molecules using sheet	
silicate intercalates William Jones, D Tilak, B Tennakoon, John M Thomas, Laurice J Williamson, James A Ballantine and J Howard Purnell	27-41
X-ray photoelectron and Auger studies of $Ag_{2+\delta}$ S A K Shukla, D D Sarma and G Sankar	43-46
Effect of ring aza substitution on luminescence of aromatic ketones.	
Luminescence of isomeric acetylpyridines S K Sarkar, S K Ghoshal and G S Kastha	47-58
Infrared spectral evidence for mono-, bi- and tetra-dentate behaviour of hexamethylenetetramine IS Ahuja, Raghuvir Singh and CL Yadava	59-63
Photoacoustic spectra of As ₂ S ₃ —As ₂ Se ₃ glasses T Somasundaram, P Ganguly and K J Rao	65-71
Stability of mixed ligand complexes of copper(II): ESR studies B S Prabhananda	113-126
On the vibrational structure involving C=O stretch in the vapour phase phosphorescence of p -benzoquinone- h_4 and $-d_4$	
V N Pandey and S N Thakur	127-131
The near uv vapour absorption spectra of 1-hydroxynaphthalene and 2-hydroxynaphthalene VN Pandey and SN Thakur	133-138
Structural, electrical and reflectance studies of the system $ZnMn_{2-2x}$ $Ni_x Ti_x O_4$ B A Mulla and V S Darshane	139-145
Viscometry in the study of molecular complexes Bharati Bhattacharjee and S N Bhat	147-152
Electronic spectra of paramethoxy benzyl alcohol and parachloro benzyl cyanide A K Sarkar, P K Mallick, S Chakravorti and S B Banerjee	197–201
Conductance behaviour of HCl in water-ethylene glycol, water-diethylene glycol and ethylene glycol-diethylene glycol mixtures	
P Sivanrasad and C Kalidas	203-209

Contents

Isotopic invariants of pyramidal symmetrical XY ₃ molecules and evaluation of molecular constants A Natarajan and V A Chinnappan	211-219
Uncatalysed oscillations in the bromate-pyrogallol system	7 67 150
R Ramaswamy and S Ramanathan	221-225
Sulphonated macroporous resin catalysts: studies on the dehydration of 2-butanol S P Sivanand, R S Singh and D K Chakrabarty	227-232
Role of salt effect and adsorption on the Liesegang ring formation of lanthanum molybdate KV Kurien, VK Vaidyan and MA Ittyachen	233–237
Periodic crystallisation of magnesium hydroxide in agar agar gel: Influence of temperature S Ambrose, F D Gnanam and P Ramasamy	239-247
Very anharmonic molecular vibrations Foil A Miller	563-587
Thermodynamics of exchange in clays: Ion exchange equilibria of transition metals and sodium ions on illite O P Bansal	589-596
EPR studies of phosphine photofragments in cancrinite matrix at 77K P Raghunathan and S K Sur	597-604
Polymer Science and Engineering	
Recent advances in the polymerisation of propylene S Sivaram	613-621
Polymer alloys: Science and practice Vikas M Nadkarni	623-637
Whither polymer engineering R A Mashelkar	639–671
Simulation and optimization of polyethylene terephthalate (PET) reactors Santosh K Gupta	673–680
Papers dedicated to S Ramaseshan on his 60th birthday	
Crystallography	
The phase problem of x-ray crystallography Herbert Hauptman	291-321
The efficient generation of phase sets by the random approach K Henderson and M M Woolfson	323-328
An assessment of criteria of fit in Patterson search C E Nordman	329-334
The probability of large structure amplitudes: The space group P_{\perp}^{\top} A J C Wilson	335-339
Maximum entropy—A new approach to the crystallographic phase	
problem Ramesh Narayan, Rajaram Nityananda and G V Vani	341-358
Extinction correction and synchrotron radiation P Suortti	359-377
Mathematical methods for the analysis of charge densities from x-ray diffraction T N Guru Row	379-384
Determination of one-dimensional crystal structures using the double Patterson function Peter Main	385-396

Precision of determination of d-spacings using a Guinier camera	
Svend Erik Rasmussen	397-401
The phase problem in neutron diffraction S K Sikka	403-414
Neutron diffraction using an electron linear accelerator BTM Willis	415-420
Electro- and magnetogyration IS Zheludev and O G Vlokh	421-427
A theoretical consideration of the intermediate phase in α - β transition of quartz N Kato	
Crystal and molecular structure of pyrrolidine dithio carbamate cobalt(III) chelate Gopinath Kartha and Kotra V Krishnamurthy	437-441
Electron density distribution in potassium bis-(carbonato) cuprate(II) E N Maslen, N Spadaccini and K J Watson	443-448
Crystallographic study of push-pull ethylenes D Adhikesavalu, Nirupa U Kamath and K Venkatesan	449-456
Structural evidence for the radical scavenging mechanism of some aminothiol group of radioprotectants	
Kalyani Vijayan, B M Vedavathi and A Mani	457-462
Structure and interactions of aspirin-like drugs M Vijayan	463-471
Structural changes in the monomeric despentapeptide (B30-B26) insulin crystal	
Ru Chang Bi, Zbigniew Dauter, Eleanor Dodson, Guy Dodson, Federico Gordiano, Rod Hubbard and Colin Reynolds	473-483
X-ray structural studies on metal complexes with nucleotides and pyridoxal-amino acid Schiff bases. Models for platinum binding to DNA and pyridoxal catalyzed reactions	
M Damodara Poojary, S P Sudhakara Rao and H Manohar	485–495
Macromolecular crystallography research at Trombay K K Kannan and R Chidambaram	497-508
On the polymorphism of the smectic A phases of highly polar compounds	497-308
N V Madhusudana	509-525
xanes and exars of copper compounds: Studies of copper carboxylates	
with metal-metal bonds of the complex formed by Pseudomonas aeruginosa P R Sarode, G Sankar and C N R Rao	527-542
Miscellaneous	321-342
Optical birefringence in a fluid near its critical point with stratification under gravity S Chatterjee and E S R Gopal	540
Anomalous dielectric dispersion in glycolchitosan—carboxy methyl cellu- lose poly-electrolyte complex containing alkali ions	543-550
R Srinivasan and Pushpa Viswanathan	551_562
The state of the s	221 707